

Stated Meeting, January 18.

Present, twenty-two members.

Mr. DU PONCEAU, President, in the Chair.

The following donations were received:—

FOR THE LIBRARY.

Tijdschrift voor Natuurlijke Geschiedenis en Physiologie. Uitgegeven door J. Van der Hoeven, M. D. Prof. te Leiden en W. H. de Vriese, M. D. Prof. te Amsterdam. Leyden, 1838.—*From the Minister of the Interior of the Netherlands.*

Flora Batava, of afbeelding en beschrijving van Nederlandsche Gewassen, door Jan Kops, en H. C. Van Hall. No. 115. Amsterdam.—*From the same.*

Verzeichniss der Königlich Sächsischen Gemälde-Galerie zu Dresden, von Friedrich Matthäi, Director etc. Dresden, 1837.—*From Mr. Thomas Sully.*

Letter from the Secretary of War, the Hon. Lewis Cass, transmitting Captain Turnbull's Report on the Survey and Construction of the Alexandria Aqueduct. Document of the House of Representatives, No. 459. 1838.—*From. Col. J. J. Abert.*

The Committee appointed to describe the Coins and Medals presented by Colonel Linah, reported and was discharged.

Professor A. D. Bache and Mr. Walker were added to the Committee on the Observatory.

Mr. John Vaughan was elected Librarian.

The Standing Committees for the year were appointed.

Professor A. D. Bache made a verbal communication relative to an extraordinary instance of the rapid corrosion of a chain cable in sea-water, reported to him by Lieutenant George M. Bache, of the United States Navy, and showed the Society a link from a portion of the cable.

The chain cable, of which this was a part, was used to anchor the Light-boat off Bartlett's reef, near New-London, Connecticut. The portion between the hawse-hole and the bridle of the anchors, about eleven fathoms in length, is particularly exposed to corrosion. In a

few months the links, or the keys of the shackles attaching the chain to the bridle, become so much oxidated as to lose the requisite tenacity.

The link, presented as a sample of the chain, is irregularly oxidated and worn, presenting semi-spheroidal cavities, and the fibrous structure of the iron is very distinctly developed. While this is the case with the wrought iron part of the link, the cast iron stud which strengthens it is not materially acted on. The raised letters upon the stud are perfect.

The circumstances in which this chain is differently situated from others, used in similar situations, result from the peculiar construction of the Light-boat, by which the copper sheathing rises above, and is in contact with, the cast-iron hawse-pipe, through which the cable passes. This cast-iron pipe has on its exterior a lead pipe. The copper sheathing is bright.

This action being attributed by Lieutenant Bache, to the contact of the copper and iron in presence of sea-water, he had ordered the copper to be removed from around the hawse-hole, the result of which experiment would test the truth of the supposition.

Professor Bache stated his wish to call special attention to the entire soundness of the cast-iron, while the wrought-iron was corroded; as if the latter had acted as a protector to the former. He believed that some general laws of interest would be made out by the Committee of the British Association engaged in investigating the subject to which this fact appeared to belong.

The Committee on making and collecting observations of Celestial Phenomena, reported in part, that they had received the following observations of Lunar Occultations of the fixed stars, in mean time of the places of observation.

1838.		<i>h m s</i>				
1.	Nov. 2, <i>d</i>	Pleiadum, Em.	13 53 11.10	d. l.	Phila. Obs'y,	W. and K.
2.	"	Im.	13 18 12.10	b. l.	"	"
3.		Em.	14 34 50.60	d. l.	"	"
4.	<i>f</i>	Im.	14 9 53.60	b. l.	"	"
5.		Em.	15 19 25.10	d. l.	"	"
6.	<i>h</i>	Em.	15 26 34.40	d. l.	"	"
7.	" 21, 58 α	Sagittarii, Im.	6 1 24.30	d. l.	"	"
8.		" Em.	7 13 20.00	b. l.	"	"
9.	*8th mag.	" Im.	6 9 12.30	d. l.	"	"
10.	60 α	Sagittarii, Im.	7 43 5.10	d. l.	"	J. and K.
11.	Dec. 27, "	Pleiadum, Im.	8 0 34.70	d. l.	"	R. and W.
12.		Em.	9 17 33.80	b. l.	"	"

1838.		<i>h m s</i>				
13.	Dec. 27, <i>f</i>	Im.	8 53	56.70	d. l. Philad. Obs'y.	P. and W.
14.				57.60	d. l.	K. and R.
15.	<i>h</i>	Im.	8 54	10.80	d. l.	P. and W.
16.				12.20	d. l.	K. and R.
17.	Nov. 2, <i>d</i>	Pleiadum, Im.	12 34	26.10	b. l. Wagner's House, T. Wagner.	
18.		Em.	13 53	28.80	d. l.	"
19.	"	Im.	13 18	48.80	b. l.	"
20.		Em.	14 34	38.60	d. l.	"
21.	<i>f</i>	Em.	15 19	24.40	d. l.	"
22.	<i>h</i>	Em.	15 26	32.40	d. l.	"
23.	Dec. 27, <i>d</i>	Pleiadum, Em.	8 34	35.00	b. l.	"
24.	<i>f</i>	Im.	8 54	0 00	d. l.	"
25.		Em.	10 1	17.90	b. l.	"
26.	<i>h</i>	Em.	10 11	59.90	b. l.	"
27.	Nov. 21, 58 ω	Sagittarii, Im.	6 3	57.35	d. l. Princeton Coll'e. Alexander.	
28.	60 α	Sagittarii, Im.	7 44	37.49	d. l.	"
29.	Dec. 24, ϵ	Piscium, Im.	9 35	30.80	d. l.	"
30.	" 26, 47	Arietis, Im.	14 20	54.50	d. l.	"
31.	" 27, <i>n</i>	Pleiadum, Im.	8 4	0.35	d. l.	"
32.		Em.	9 21	30.40	b. l.	A. and B.
33.	<i>d</i>	Im.	7 21	33.50	d. l.	"
34.		Em.	8 38	38.00	b. l.	"
35.	<i>p?</i>	Im.	7 59	20.10	d. l.	A.
36.	<i>f</i>	Im.	8 57	7.85	d. l.	A.
37.		Im.		8.15	d. l.	B.
38.		Em.	10 6	11.30	b. l.	A.
39.	<i>h</i>	Im.	8 57	32.76	d. l.	A. and B.
40.		Em.	10 21	31.55	b. l.	A.
41.	Nov. 13, α	Virginis, Im.	20 32	38.40	b. l. Dorchester Obs'y.	Bond.
42.	Dec. 2, <i>c</i>	Aurigæ, Em.	17 32	19.00	d. l. Paine's House, Boston.	Paine.
43.	" 24, ϵ	Piscium, Im.	9 53	16.84	d. l.	"
44.	" 27, <i>f</i>	Pleiadum, Im.	9 18	43.28	d. l.	"
45.	Nov. 21, 58 ω	Sagittarii, Im.	6 12	33.20	d. l. Holcomb's Obs'y.	Holcomb.
46.	Dec. 24, ϵ	Piscium, Im.	9 44	29.50	d. l.	"
47.	" 27, <i>n</i>	Pleiadum, Im.	8 16	43.10	d. l.	"

No. 1, at the Philadelphia Observatory of the Central High School. Lat. $39^{\circ} 57' 8''$; longitude $5h 0m 42s$ west of Greenwich.

No. 2, good observation. No. 3, doubtful, eye not directed to the exact place of emersion. Nos. 4, 5, 6, 7, 9, 11, 13, 14 and 15, good observations. No. 10, doubtful. No. 12, star reappeared in contact with bright limb.

No. 16, doubtful 1s.

No. 17, at T. Wagner's house, 2.16s in time, east of the Philadelphia Observatory, with 5 feet equatorial. No. 18, probably too late several seconds.

No. 19, doubtful. No. 20, good observation, preferable to No. 3. Nos. 21, 22 and 24, good observations. Nos. 23, 25 and 26, uncertain, from brightness of moon's limb.

No. 27, at Prof. Stephen Alexander's house, 6" north, 0.3s in time, east of Nassau Hall, Princeton College, New Jersey.

Nos. 27, 28, 29, 30, 31, 32, 33, 36, 37 and 39, satisfactory observations.

Nos. 34, 38 and 40, uncertain from brightness of moon's limb.

No. 35, doubtful 1s. Nos. 33 and 36 appeared to be followed by a slight brush of light.

No. 41, at William Cranch Bond's observatory, Dorchester, Mass. Lat. $42^{\circ} 19' 15''$; longitude $4h 44m 17.3s$ W. of Greenwich.

No. 42, at R. T. Paine's house, Boston. Lat. $42^{\circ} 20' 56''$; long. $4h 44m 16.3s$. Observation uncertain. Nos. 43 and 44, very good observations.

No. 45, at A. Holcomb's observatory, Southwick, Mass. Lat. $42^{\circ} 0' 41''$; long. $4h 51m 15.5s$.

The initials denote respectively,

W. Sears C. Walker.

K. E. O. Kendall.

J. George M. Justice.

R. William H. C. Riggs.

P. Robert M. Patterson.

A. Stephen Alexander.

B. J. V. Z. Blaney.

b. l. and d. l. denote respectively the bright and dark limbs of the moon.

The following candidates were elected members of the Society:—

JAMES PRINSEP, of Calcutta.

JOHN EDWARDS HOLBROOK, M. D., of Charleston, S. C.

JOHN C. CRESSON, of Philadelphia.

JAMES C. BOOTH, of Philadelphia.

EDWARD COLES, of Philadelphia.

J. F. ENCKE, of Berlin.

A. QUETELET, of Brussels.

Stated Meeting, February 1.

Present, twenty members.

MR. DU PONCEAU, President, in the Chair.

The following donations were received:—

FOR THE LIBRARY.

L'Art de vérifier les dates, depuis l'année 1770, jusqu'à nos jours.

Publié par M. le Marquis de Fortia, membre de l'Institut. Paris, 1837.—*From Mr. D. B. Warden.*